

# EXHIBIT 1

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

SONOS, INC.,

Plaintiff,

vs.

GOOGLE LLC,

Defendant.

Case No. 6:20-cv-00881-ADA

JURY TRIAL DEMANDED

**GOOGLE LLC'S FINAL INVALIDITY CONTENTIONS**

## **B. Invalidity Under 35 U.S.C. § 112**

Pursuant to the Amended Scheduling Order (Dkt. 48), Google identifies below grounds of invalidity under 35 U.S.C. § 112. The grounds identified below both individually and collectively render the '033 Asserted Claims invalid under the statutory requirements of § 112. By identifying certain claim language below, Google does not imply that such language is entitled to any patentable weight when comparing the claim as a whole to the prior art. Google's identifications are made based on Google's present understanding of the Asserted Claims and Sonos's apparent interpretation of these claims as reflected in its Infringement Contentions, and Google reserves the right to amend these identifications, including in response to claim constructions and claim interpretations that would render claim limitations not enabled, lacking in written description, or indefinite.

### **1. Lack of Enablement And Written Description Under 35 U.S.C. § 112 ¶ 1**

Based on Google's present understanding of the Asserted Claims and Sonos's apparent interpretation of these claims as reflected in its Infringement Contentions, the '033 Asserted Claims may fail to satisfy the requirements of § 112, ¶ 1 because the specification and original patent application fail to provide an enabling disclosure of and written description support for at least the following limitations below (or terms contained therein):

- “first mode ... configured for playback” and “second mode ... configured to control”
- “transport controls to control playback”
- “remote playback queue”
- “remote playback queue provided by a cloud-based computing system associated with a cloud-based media service”

- “operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service”
- “while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue”
- “while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices”
- “based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item”
- “detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device”
- “after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue”)
- “wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service”
- “wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices

comprises user input indicating a selection of the group of playback devices”

- “operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device”
- “transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device”
- “after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation”
- “based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device”
- “wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.”
- “wherein the cloud-based computing system associated with the cloud-based media service includes one or more cloud servers”
- “wherein displaying the representation of the one or more playback devices comprises: displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred”
- “before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue”

For example, the phrase “remote playback queue” is entirely absent from the specification and was only added to the pending claims during prosecution in November 2019. The specification does not describe a “remote playback queue” nor provide enabling disclosure to one of ordinary skill in the art.

**5. Invalidity Under 35 U.S.C. § 102(f) and Improper Inventorship**

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

**B. Invalidity Under 35 U.S.C. § 112**

Pursuant to the Amended Scheduling Order (Dkt. 48), Google identifies below grounds of invalidity under 35 U.S.C. § 112. The grounds identified below both individually and collectively render the '615 Asserted Claims invalid under the statutory requirements of § 112. By identifying certain claim language below, Google does not imply that such language is entitled to any patentable weight when comparing the claim as a whole to the prior art. Google's identifications are made based on Google's present understanding of the Asserted Claims and Sonos's apparent interpretation of these claims as reflected in its Infringement Contentions, and Google reserves the right to amend these identifications, including in response to claim constructions and claim interpretations that would render claim limitations not enabled, lacking in written description, or indefinite.

**1. Lack of Enablement And Written Description Under 35 U.S.C. § 112 ¶ 1**

Based on Google's present understanding of the Asserted Claims and Sonos's apparent interpretation of these claims as reflected in its Infringement Contentions, the '615 Asserted Claims may fail to satisfy the requirements of § 112, ¶ 1 because the specification and original patent application fail to provide an enabling disclosure of and written description support for at least the following limitations below (or terms contained therein):

- “causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device”
- “local playback queue”
- “one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service”
- “causing, via a control device, a graphical interface to display a control interface including one or more transport controls to control playback by the control device; / causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device / causing the graphical interface to display a control interface including one or more transport controls to control playback by the control device”
- “after connecting to a local area network via a network interface, identifying, via the control device, playback devices connected to the local area network; / after connecting to a local area network via a network interface, identifying playback devices connected to the local area network”
- “causing, via the control device, the graphical interface to display a selectable option for transferring playback from the control device (Claim 1) / causing the graphical interface to display a selectable option for transferring playback from the control device”
- “detecting, via the control device, a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the

local area network; / detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network”

- “after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises”
- “causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service”
- “causing playback at the control device to be stopped”
- “modifying the one or more transport controls of the control interface to control playback by the playback device”
- “causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content”
- “wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair”



- “herein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony”
- “wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device”
- “causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the particular playback device in the particular arrangement”
- “causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service”
- “wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device”
- “wherein detecting the set of inputs comprises detecting an input that causes playback at the control device to be stopped”
- “wherein detecting the set of inputs comprises detecting selection of a button on the control interface”